Draft Mitigated Negative Declaration

- 1. Project title: Homan Final Map Subdivision
- 2. Lead agency name and address: Humboldt County Community Development Services Department, 3015 H Street, Eureka, CA 95501-4484; Phone: (707) 445-7541; Fax (707) 445-7446
- 3. Contact person and phone number: Trevor Estlow, Senior Planner, Phone: 707-268-3740, Fax: 707-445-7446
- 4. Project location: The project site is located in Humboldt County, in the Trinidad area, on the northwest side of Anderson Lane, approximately 350 feet northeast of the intersection of Anderson Lane with Stagecoach Road, on the property known as 101 Anderson Lane.
- 5. Project sponsor's name and address: John and Katrin Homan, PO Box 1261, Trinidad, CA 95570
- 6. General plan designation: Rural Residential (RR(a)). Trinidad Area Plan (TAP). Density: one unit per 2 acres.
- 7. Zoning: Rural Residential Agriculture with combining zones for Manufactured Homes, Alquist-Priolo Fault Hazard and Design Review (RA-2-M/G,D).
- 8. A Major Subdivision of an approximately 19 acre parcel into 9 lots ranging in size between 1.13 acres and 3.7 acres. The subdivision will consist of three phases. A Special Permit is required to allow Lot Size Modification to allow parcels less than 2 acres in size and less than 175 feet in width pursuant to Section 313-99.1 of the Humboldt County Code (HCC). The Special Permit also authorizes the removal of up to 36 trees over 12 inches diameter at breast height (dbh). An exception to the solar shading requirements is requested due to the large (over one acre) size of the lots pursuant to Section 322.5-8 of the HCC. The Coastal Development Permit is required for the development within the Coastal Zone. The existing parcel is currently developed with a single family residence which will remain on proposed Lot 8. All lots will be served by wells and onsite wastewater disposal systems.

The property is in the Coastal zone, and is crossed by an intermittent stream. The site is known to possess wetlands or "other wet areas" both adjacent to, and isolated from the stream. A 100-feet streamside management area is proposed to buffer all wet areas adjacent to the stream, and a 50-feet setback is proposed from the isolated wetland. The California Department of Forestry designates the site for timber production, although no active commercial forestry which would require a Timber Harvest Plan has occurred on the site for many years, although maintenance to address storm damage has been conducted on site. In order to convert the site for residential development, a timberland conversion Timber Harvest Plan will be submitted to the CDF subsequent to approval of the Tentative Map and adoption of CEQA findings by the lead agency (County of Humboldt). Any tree removal needed to accommodate development is expected to be addressed by this plan.

- 9. Surrounding land uses and setting: The parcel is in a rural, largely wooded area with slopes varying from relatively flat to up to 50%. The site is approximately 1/3 mile north of the City of Trinidad. Surrounding uses to the north, east and south are primarily rural residential parcels, generally between one and five acres in size. Most parcels are developed with a single family residence, with the remainder vacant. A small hotel (cabins, restaurant and bar) and a mobilehome park are located along Patricks Point Road to the east of the site. Trinidad State Beach is located across Stagecoach Road to the west of the subject site.
- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.) County of Humboldt Public Works Department, County of Humboldt Department of Environmental Health, California Department of Forestry and Fire Protection (Calfire)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or Potentially Significant Unless Mitigation is Incorporated" as indicated by the checklist on the following pages.

☑ Aesthetics ☑ Biological Resources □ Hazards & Hazardous	☐ Agriculture Resources ☐ Cultural Resources ☐ Hydrology / Water Quality	☑ Air Quality☑ Geology / Soils☐ Land Use / Planning		
Materials ☐ Mineral Resources	□ Noise	□ Population / Housing		
□ Public Services ☑ Utilities / Service Systems	□ Recreation□ Mandatory Findings of Signification	☐ Transportation / Traffic		
DETERMINATION: (To be on the basis of this initial evolution I find that the proposed NEGATIVE DECLARAT	completed by the Lead Agency) aluation: project COULD NOT have a signon will be prepared. proposed project COULD have a signorposed	gnificant effect on the environment, and a significant effect on the environment, there ions in the project have been made by or		
agreed to by the project p	proponent. A MITIGATED NEGA	TIVE DECLARATION will be prepared.		
ENVIRONMENTAL IMI	PACT REPORT is required.			
significant unless mitig adequately analyzed in a addressed by mitigation	ated" impact on the environm in earlier document pursuant to a measures based on the earlier ar	tially significant impact" or "potentially ent, but at least one effect 1) has been applicable legal standards, and 2) has been halysis as described on attached sheets. An timust analyze only the effects that remain		
I find that although the proposed project COULD have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.				
Signature				
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<u> Frevor Estlow, Senior Planne</u> Printed name	For Humb	ooldt County Community Development Department, Planning Division		

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take into account the whole action involved, including off-site was well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, "Earlier Analyses," may be crossreferenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addresses. Identify which effects from the above checklist were within the scope of and adequately analyze in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated,:" describe the mitigation measures which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plan, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats, however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue identifies:
 - a) The significant criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?			×	
b) Substantially damage scenic resources, including, but not			×	
limited to, trees, rock outcroppings, and historic buildings				
within a state scenic highway?				
c) Substantially degrade the existing visual character or qual-		×		
ity of the site and its surroundings?				
d) Create a new source of substantial light or glare which		×		
would adversely affect day or nighttime views in the area?				

1. AESTHETICS

Finding: The project will have a less than significant adverse effect on a scenic vista; a less than significant effect on scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The project will have a potentially significant adverse effect on existing visual character or quality of the site and its surrounding; and will create a potentially significant new source of substantial light or glare which would adversely affect day or nighttime views in the area, however mitigation measures will be incorporated which will be sufficient to reduce the effects below the threshold of significance.

<u>Discussion</u>: The building sites identified on proposed Parcels 1 through 5 will be set back at least 50' from Stagecoach Road and likely much further due to leachfield locations. These locations will be partially visible from Stagecoach Road. A 50 foot vegetation buffer will be retained along Stagecoach Road. All future residences on the parcels will require a Special Permit for Design Review and a Coastal Development Permit (CDP). Aesthetic quality of the individual residences will be the primary focus of Design Review Permits and will be an important focus of Coastal Development Permits. The subject property is planned and zoned for residential uses. A retaining wall will be constructed along the private access road for a length of approximately 350 feet. The retaining wall, necessary to widen the access road, will vary in height from approximately 2 feet to 5 feet and will be minimally visible due to the wooded nature of the site.

The parcel provides an appealing view of a largely natural wooded hillside from Stagecoach Road, Anderson Lane and adjacent properties. Trees and other vegetation will be removed from portions of the site for development of residences, maintenance of fire-safe buffers, and the installation of driveways from Stagecoach Road and along the existing on-site private driveway. Subsequent to the approval of the proposed Final Map Subdivision, but prior to tree removal for development, the property owner will be required to secure a Timberland Conversion Permit from the California Department of Forestry and Fire Protection (Calfire) for conversion of the site to primarily residential uses. The location of all trees onsite has been identified and is shown on an exhibit on the proposed subdivision map. Removal of trees from the subject site would have a potentially significant effect on the visual character of the site, if not properly mitigated. The proposed design places building pads and driveways in locations which generally minimize the removal of substantial trees.

Proposed Parcel 7 has a coastal view; and overlooks Trinidad State Beach; however, site visits indicate that the view does not include College Cove Beach or any of the trails through the park, which limits the potential impact of development. Furthermore, the development as proposed is characteristic of the area to the north, south and east of the subject site, with single family residences on one to five acre parcels. Lot design and building pad locations have been selected to minimize tree removal on the site. Widening of the existing access drive to the rear and upper portions of the site (and adjacent properties) will require the extension of a hillside cut on the uphill portion of the site. As there is an existing hillside cut, this is not expected to noticeably alter the appearance of the hillside. Road widening will also require the instal-

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lation of retaining walls on the downhill side of the road. Preliminary investigation indicates that the retaining walls will have a maximum height of five feet, which is low enough to be largely obscured by existing trees on the site. There is no indication that the Final Map or the future residences will negatively impact views from the public roads. Therefore, staff concludes the subdivision or any future development on the parcels will not have a significant impact on the visual character of the site or surroundings.

Lighting will be installed during development of the subdivided parcels. Residential lighting is typical in the area, and there is no indication that onsite uses will differ from those in the neighborhood. However, improperly designed or installed lighting could create nuisance light and glare on the adjacent roadways or residential parcels unless mitigated appropriately.

With the mitigation described below, staff concludes that the proposed project will not result in a significant adverse impact on any scenic vista or resource; will not result in a substantial degradation to the existing visual character or quality of the site and its surroundings; and will not create a new source of substantial light or glare.

MITIGATION MEASURE NO. 1

A maximum of two new driveway access points will be permitted from Stagecoach Road to serve the proposed development. All new driveways will be designed to meander to avoid existing vegetation to the greatest extent possible, with a priority placed on the preservation of existing mature trees.

MITIGATION MEASURE NO. 2

A 50 foot wide landscape buffer shall be maintained along Stagecoach Road, and shown on the face of the Final Map or in an accompanying exhibit. No buildings will be permitted in this buffer. All trees with a diameter at breast height (dbh) greater than six inches, with the exception of hazard trees as identified by a qualified forestry professional or arborist shall be retained in the landscape buffer area.

MITIGATION MEASURE NO. 3

Lighting shall be fully shielded away from nearby residences and roadways (County & private) to minimize off-site light and glare effects. In addition, no portion of the illuminated fixture or lens shall extend below or beyond the canister or light shield.

2. AGRICULTURE RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies my refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

a. Would the project.		
a) Convert Prime Farmland, Unique Farmland, or Farmland		×
of Statewide Importance (Farmland), as shown on the maps		
prepared pursuant to the Farmland Mapping and Monitoring		
Program of the California Resources Agency, to non-		
agricultural use?		
b) Conflict with existing zoning for agricultural use, or a Wil-		×
liamson Act contract?		
c) Involve other changes in the existing environment which,		×
due to their location or nature, could result in conversion of		
Farmland, to non-agricultural use?		

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2. AGRICULTURE RESOURCES

<u>Finding</u>: The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use; will not conflict with existing zoning for agricultural use, or a Williamson Act contract; and will not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.

<u>Discussion</u>: The State FMMP has not yet been extended to Humboldt County; however, the County maintains its own database which indicates the subject site is not rated as prime agricultural land. Although the property is zoned Rural Residential Agriculture, the project site has no farmlands, nor lands of a size and soil composition suitable for agricultural production, and no such lands exist on adjacent or nearby properties. The property is partially wooded, portions are steep and rocky, portions are wet, and the site is near the coastal bluffs where moist salt air and winds would be detrimental to most agricultural crops. There are no Williamson Act contracts on the subject or adjacent properties. Therefore the project will have no impact on farmlands or agricultural lands.

3. AIR OUALITY

Where available, the significant criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable		×
air quality plan?		
b) Violate any air quality standard or contribute substantially	×	
to an existing or projected air quality violation?		
c) Result in a cumulatively considerable net increase of any	×	
criteria pollutant for which the project region is non-attainment		
under an applicable federal or state ambient air quality stan-		
dard (including releasing emissions which exceed quantitative		
thresholds for ozone precursors)?		
d) Expose sensitive receptors to substantial pollutant concen-		×
trations?		
e) Create objectionable odors affecting a substantial number		×
of people?		

3. AIR QUALITY

<u>Finding</u>: The project will not conflict with or obstruct implementation of the applicable air quality plan; will not violate any air quality standard or contribute substantially to an existing or projected air quality violation, following adoption of appropriate mitigation measures; will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); will not expose sensitive receptors to substantial pollutant concentrations; and will not create objectionable odors affecting a substantial number of people.

Discussion:

A) The North Coast Unified Air Quality Management District (NCUAQMD) is responsible for monitoring

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and enforcing local and state air quality standards. Air quality standards are set for emissions that may include, but are not limited to: visible emissions, particulate matter, and fugitive dust. NCUAQMD Rule 104, Section 1.1, "Public Nuisance" prohibits any person from discharging "from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the health, comfort, repose or safety of any such persons or the public or which cause or have an natural tendency to cause injury or damage to business or property

- B) C) With regard to particulate matter, all of Humboldt County has been designated by the California State Air Quality Board as being in "non-attainment" for PM-10 air emissions. PM-10 air emissions include chemical emissions and other inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM-10 emissions include smoke from wood stoves and airborne salts and other particulate matter naturally generated by ocean surf. Because of, in part, the large number of wood stoves in Humboldt County and because of the generally heavy surf and high winds common to this area, Humboldt County has exceeded the state standard for PM-10 air emissions. Therefore, any use or activity that generates unnecessary airborne particulate matter has the potential to contribute to an ongoing air quality non-attainment. Staff recommends that in order to reduce potential particulate matter impacts, that a mitigation measure be incorporated into the project that requires compliance with NCAQMD Rule 104, Section 4.0 "Fugitive Dust Emissions." Rule 104, Section 4.1 prohibits any person from "handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne." Rule 104, Section 4.2 requires reasonable precautions to prevent particulate matter from becoming airborne, including, but not limited to:
- 4.2.1 Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
- 4.2.2 Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.
- 4.2.3 Conduct agricultural practices in such a manner as to minimize the creation of airborne dust.
- 4.2.4 The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- 4.2.5 The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
- 4.2.6 The paving of roadways and their maintenance in a clean condition.
- 4.2.7 The prompt removal of earth or other track out material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.
- D) E) Regarding sensitive receptors, the Pacific Ocean is home to a number of marine species and sensitive habitat types that are considered "sensitive receptors." Other sensitive receptors such as schools and hospitals are not present in the project vicinity. Development of the subject property will, as required by regulation, meet all applicable local, state and federal standards for building construction, debris disposal and pollutant control. Potential temporary short-term impacts to the sensitive receptors could result from dust caused by road construction and future residential development of the parcels. These impacts are short-term and less than significant. Therefore, the project will not significantly expose sensitive receptors to substantial pollutant concentrations.

With regard to objectionable odors, the project does not propose any use or construction technique that will result in odors that could reasonably be considered objectionable by the general public.

The NCUAQMD has advised that, generally, an activity that individually complies with the state and lo-

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cal standards for air quality emissions will not result in a cumulatively considerable increase in the countywide PM-10 air quality violation. Further, the NCUAQMD has advised that smaller construction projects do not generate particulate matter greater than the local and/or state standard. Therefore, staff concludes that with the mitigation measure listed below, which requires compliance with NCUAQMD standards and regulations that the project will not result in adverse air quality impacts, nor result in a cumulatively considerable increase in the PM-10 non-attainment.

MITIGATION MEASURE NO. 4

The applicant, at all times, shall comply with Air Quality Rule 104, Section 4.0 Fugitive Dust Emissions to the satisfaction of the NCUAQMD. This will require, but may not be limited to:

- Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
- The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
- The paving of roadways and their maintenance in a clean condition.
- The prompt removal of earth or other track out material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

l.	BIOLOGICAL RESOURCES. Would the project:				
	a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish		×		
	and Game or U.S. Fish and Wildlife Service?				_
	b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or re-		×		
	gional plans, policies, regulations or by the California Depart-				
	ment of Fish and Game or US Fish and Wildlife Service? c) Have a substantial adverse effect on federally protected		×		
	wetlands as defined by Section 404 of the Clean Water Act (in-				
	cluding, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or				
	other means?				
	d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with estab-		×		
	lished native resident or migratory wildlife corridors, or im-				
	pede the use of native wildlife nursery sites?	_	_	_	_
	e) Conflict with any local policies or ordinances protecting				×
	biological resources, such as a tree preservation policy or ordinance?				
	f) Conflict with the provisions of an adopted Habitat Conser-				×
	vation Plan, Natural Community Conservation Plan, or other	_		_	
	approved local, regional, or state habitat conservation plan?				

4: BIOLOGICAL RESOURCES:

<u>Finding</u>: The project will not conflict with any local policies or ordinances protecting biological resources, and will not Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community

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Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species, have a substantial adverse effect on any riparian habitat or other sensitive natural community, have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means and will not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or impede the use of native wildlife nursery sites, provided appropriate mitigation measures are implemented.

Discussion:

Regulatory Context

The Homan property lies within the California Coastal Zone, under primary jurisdiction of the Humboldt County Community Development Services, Planning Division. Approved land uses and standards for the property are provided in *The Humboldt County General Plan, Trinidad Area Plan of the Humboldt County Local Coastal Program*, in conformance with the policies of the California Coastal Act of 1976.

The Coastal Commission has jurisdiction over Environmentally Sensitive Habitat Areas (ESHA) within the Coastal Zone and requires that any development within or adjacent to such areas be compatible with the continuance of such habitat areas. Section 30107.5 of the Coastal Act defines ESHA as any areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Under Section 30240 of the Coastal Act, the Coastal Commission requires that: (a) environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas, and that (b) development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The *Trinidad Area Plan* identifies coastal streams and rivers, including intermittent streams such as the one which crosses the subject site, as ESHA. The intermittent stream would require a protected buffer zone, or Streamside Management Area (SMA), along the creek's riparian corridor. The Plan states, "Riparian corridors on all perennial and intermittent streams shall be, at a minimum, the larger of the following: (1) 100 feet, measured as the horizontal distance from the stream transition line on both sides, (2) 50 feet plus four times the average percent of slope, measured as the slope distance from the stream transition line on both sides [of the stream], (3) where necessary, the width of the riparian corridor shall be expanded to include significant areas of riparian vegetation adjacent to the corridor, slides, and areas with visible evidence of slope instability, not to exceed 200 feet measured as a horizontal distance (Section 3.30.B.5.d)." No development would be allowed within the SMA unless it is determined, based on specific factual findings, that such development would not result in significant adverse impacts to fish, wildlife, riparian habitat, or soil stability. Furthermore, as recommended by the California Department of Fish and Game, symbolic fencing, such as split rail or other similar wildlife friendly fencing will be installed along the SMA/Wetland Buffer setback.

Critical habitats for rare or endangered species listed on state or federal lists are also considered ESHA within the County Trinidad Planning Area. The County, in coordination with the California Department of Fish and Game (CDFG), requires that a biological assessment be performed to determine the potential presence of rare or endangered species known to occur in the project vicinity. If critical habitat is identified, a 100-foot buffer from any adjacent development will likely be required.

Habitat and Sensitive Species Potentially Present at the Project Site

In accordance with the applicable regulatory requirements, biological assessment was conducted by Win-

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zler and Kelly (Appendix A) at the proposed subdivision. The assessment consists of a Stream Transition Line and Wetland Delineation performed on February 5, 2008, and Special Status Plant Study and Special Status Terrestrial Vertebrate Study performed on February 5, April 4, June 4-5, July 22 and 24, 2008. Please refer to the Biological Assessment for the habitat conditions and species composition present at the site. Site investigation found no evidence of inhabitation by any sensitive species, however, riparian and wetland habitat areas were identified, as well as the presence of habitat for raptor species such as Cooper's hawk and Sharp-shinned hawk. Mitigation measures are proposed to protect the wetland and riparian habitat areas and to protect nesting raptors if any inhabit the site on a seasonal basis.

The California Natural Diversity Database (CNDDB) was queried for known occurrences of rare, threatened, and endangered species, also referred to as sensitive species, within the Trinidad 7.5′ USGS quadrangles. The site was then examined for evidence of the presence of those species or of their specific habitat. No evidence of either sensitive plant or animal species was found on the site; however two potential types of habitat were identified. An unnamed intermittent stream crosses a portion of the subject site, traveling east to west along the southerly property boundary, with associated riparian and wetland areas, all of which are valuable both as potential habitat for sensitive species and as a wildlife corridor. This unnamed intermittent stream is colloquially referred to as "College Cove Creek" but is not mapped or named by the County of Humboldt or the U.S. Geological Service (USGS) as a "blue line" stream. Aside from the stream, there is one isolated wetland, located on the subject site, but separated from the areas proposed for development by a private access road, and a considerable number of mature trees which are potential nesting sites for raptors.

The riparian habitat and streambed features of the intermittent stream will remain intact during and after development operations, pursuant to the *Humboldt County Grading Ordinance (June, 2002)* SMA restrictions. All proposed and future improvements on the parcels will be within the building envelope, which restrict development on the subdivided parcels to be at least 100 feet from the stream and associated wetlands. A setback of 50 feet is proposed from the isolated wetland, reflecting the barrier imposed by the intervening roadway. SMA setbacks and effectively protect the sensitive habitat and any listed species that may occur within the stream corridor. DFG biologists were consulted on-site regarding the appropriate location of SMA and wetland areas and setbacks.

The biological assessment finds that raptor nesting habitat is available in woodlands throughout the project area. While the trees which potentially serve as nesting sites are quite common in the area, there is the potential that tree removal or construction activity would affect individual nesting pairs if any are present. The risk of such disturbance is limited to the raptor nesting season (March-August). Pre-construction and pre-removal surveys will be required if construction activities occur during the nesting season to ensure that adequate measures are taken to protect nesting raptors, if any inhabit the site.

While lot design, building pad locations and likely driveway alignments have been selected to minimize tree removal, the construction of driveways, and one or more of the houses may require approval of a Special Permit for Major Vegetation Removal. According to §313-64 of the Humboldt County Code (HCC), the removal of trees 12" dbh or larger and the removal of vegetation (grasses, shrubbery, small trees, etc) in an area 6,000 square feet or larger constitutes Major Vegetation Removal.

Conclusion

In accordance with ESHA requirements for the Trinidad Planning Area, a 100-foot SMA buffer shall be preserved on either side of the intermittent stream and a 50′ buffer shall be preserved around the isolated wetland. Based on the field assessment and knowledge of sensitive species, the 100-foot SMA will adequately protect habitat values of the creek and riparian corridor, thus avoiding either a direct or indirect impact on any sensitive plant or animal species that may occur within that area. As shown on the Site

File No.: APN **515-191-37** (Trinidad area)

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Plan, the developable portions of the subdivided parcels would not encroach the SMA buffer. Further protection of nesting raptors will be provided through pre-construction and pre-removal surveys if construction or tree removal is proposed during the nesting season.

MITIGATION MEASURE NO. 5

A setback of at least 100-feet from the intermittent stream and of 50-feet from the isolated wetland will be permanently maintained by the applicants or subsequent land owners to the satisfaction of the Humboldt County Planning Division, California Coastal Commission, and California Department of Fish and Game. Said setback shall be shown on the recorded development plan, on file at the Humboldt County Planning Division.

MITIGATION MEASURE NO. 6

If construction activities and/or tree removal are to be conducted during the breeding season (March through August), raptor surveys shall be conducted prior to the start of operations and/or tree removal. If no raptor species are detected during survey efforts, construction can proceed without restrictions. However, if any of the three species are detected, construction activities shall be restricted to preclude activities that produce noise greater than current ambient levels (55-65dB) during the breeding period. Under no circumstances shall a tree hosting nesting raptors be removed during the nesting season.

MITIGATION MEASURE NO. 7

Symbolic fencing such as split rail or other wildlife friendly fencing shall be installed along the SMA/Wetland Buffer setback on Parcels 4 and 5.

5. CULTURAL RESOURCES. Would the project:			
a) Cause a substantial adverse change in the significance of a		×	
historical resource as defined in §15064.5?			
b) Cause a substantial adverse change in the significance of an		×	
archaeological resource pursuant to §15064.5?			
c) Directly or indirectly destroy a unique paleontological re-	×		
source or site or unique geologic feature?			
d) Disturb any human remains, including those interred out-	×		
side of formal cemeteries?			

5. CULTURAL RESOURCES

<u>Finding</u>: The project will not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5; or of an archaeological resource pursuant to §15064.5; will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and will not disturb any human remains, including those interred outside of formal cemeteries if appropriate mitigation measures are implemented.

<u>Discussion</u>: A) – D) Native Americans are known to have settled along the Humboldt County coast, in the general vicinity of the project area. Subsequently, non-Native Americans settled in these areas prior to the establishment of the Cities of Eureka and Arcata. Therefore, paleontological, archaeological, historical or unique ethnic or sacred resources are known to occur throughout the North Coast region. For this Initial

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Study, a request was made to the North Coastal Information Center, a unit of the State Historical Resources Information System, for a cultural resources record search in the area affected by the proposed project and surrounding vicinity. The Center reported that there are no reports of historical resources from the project site and further studies for historical resources are not recommended. Additionally, a Fault Rupture Hazard Evaluation, Soils Report and Wetlands Delineation each study required considerable trenching and excavations ranging from one foot to 21 feet in depth, throughout the site. No evidence of paleontological, archaeological, historical, ethnic or religious resources was found during this process. Given the lack of known historical resources at the site and the nature of the proposed project it is unlikely that the proposed subdivision will cause a significant adverse change in any historical or archaeological resources. However, the potential for unrecorded and previously undetected cultural resources in the area that will be affected by the elements of this project is considered very low but not nonexistent. Therefore, due to the proximity to known cultural resource sites, should historic fossils be discovered, as required by State law all construction activity will cease and a qualified Archaeologist will be retained to determine the significance of the discovery and the process to avoid, reduce or compensate for the impact. And, pursuant to the California Health and Safety Code Section 7050.5, if human remains are encountered, all work must cease and the County Coroner contacted. Staff recommends that a mitigation measure be incorporated to require compliance with state law.

MITIGATION MEASURE NO. 8

If any area of cultural deposits is discovered during the course of the project, as required by law, all work shall cease and a qualified cultural resources specialist shall be contacted to analyze the significance of the find and formulate further mitigation (e.g. project relocation, excavation plan, protective cover). And, pursuant to the California Health and Safety Code Section 7050.5, if human remains are encountered, all work must cease and the County Coroner contacted.

6. GEOLOGY AND SOILS. Would the project: a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involv-			
ing:			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Divi- sion of Mines and Geology Special Publication 42?	×		
ii) Strong seismic ground shaking?	×		
iii) Seismic-related ground failure, including liquefaction?	×		
iv) Landslides?	×		
b) Result in substantial soil erosion or the loss of topsoil?		×	
c) Be located on a geologic unit or soil that is unstable, or that	×		
would become unstable as a result of the project, and poten-			
tially result in on- or off-site landslide, lateral spreading, subsi-			
dence, liquefaction or collapse?			
d) Be located on expansive soil, as defined in Table 18-1-B of			×
the Uniform Building Code (1994), creating substantial risks to			
life or property?			
e) Have soils incapable of adequately supporting the use of	×		

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septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

6. GEOLOGY AND SOILS:

<u>Finding</u>: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving i) Rupture of a known earthquake fault, ii) Strong seismic ground shaking, iii) Seismic related ground failure, including liquefaction, or landslides, provided appropriate mitigation measures are applied. The project will not result in substantial soil erosion or the loss of topsoil. The project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project provided appropriate mitigation measures are applied. The project will not be located on expansive soils. The project will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater provided appropriate mitigation measures are applied.

Discussion:

The project is located near a known fault (Trinidad Fault) delineated on the Alquist-Priolo Earthquake Fault Zoning Map. LACO Associates was retained to conduct an Alquist-Priolo Fault Investigation and to prepare an R-1 Engineering Geologic/Foundation and Soils Report for the entire subject site. Pacific Watershed Associates (PWA) was retained to prepare an Onsite Wastewater Evaluation.

Nearly the entire property is located within a State of California Alquist-Priolo Earthquake Fault Zone as delineated by the State of California under the Alquist-Priolo Earthquake Fault Zone Act (A-P Act) of 1972 (California Public Resources Code, Chapter 7.5, Division 2). The intent of the A-P Act is to mitigate the hazard of surface fault rupture, and mandates specific, detailed geologic studies to demonstrate the presence or absence of active faults for certain projects within Earthquake Fault Zones. Subdivision of land within an Earthquake Fault Zone is subject to the conditions of the A-P Act; therefore, the purpose of this investigation is to assess the potential for surface fault rupture at the site. The site is included in an Earthquake Fault Zone based on its proximity to a reportedly active trace of the Trinidad fault and is therefore subject to the Fault Zoning Act (CDMG 1997). The Alquist-Priolo Fault Investigation included the excavation of ten separate trench segments to depths of 10 to 21 feet for a cumulative length of approximately 1,600 feet across the areas encompassing the anticipated building sites. Four trench segments were specifically located to target the mapped trace of the Trinidad Fault. Evidence indicated that the Trinidad Fault may not be accurately located on the Alquist-Priolo maps where it is shown as crossing the subject site. However, the report does describe a secondary zone of previously unmapped faults across portions of the subject site. The report recommends that a considerable portion of the property be designated as exclusion zones where new buildings for human habitation should be prohibited to reduce the risk from surface fault rupture. Areas were placed within the exclusion zones if they were in the vicinity of potentially active faults or if they were not cleared for development through trench investigations.

The purpose of the R-1 Engineering Geologic/Foundations and Soils report was to characterize the subgrade soils, identify potential geologic hazards, and develop recommendations for foundation support and earthwork. The report includes an assessment of potential earthquake-related geologic and geotechnical hazards including surface fault rupture, liquefaction, differential settlement and site instability. Other geologic concerns including landslides, flooding, and the shrink-swell potential of on-site soils are also addressed. The report also presents seismic design parameters per the 2007 California Building Code, and a discussion of appropriate foundation design options. Finally, the R-1 report includes a variety of recommendations regarding foundation design, slope design, grading, compaction, drainage, etc.

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Finally, the Onsite Wastewater Evaluation determined the suitability of the site, and the individual proposed parcels, for the use and location of individual septic systems and leach fields. The study considered the soil characteristics on site, including percolation rates, topography and proximity to wells, water features, property lines, etc. The report includes recommendation for septic system design (including gravity vs. pressure systems), and suggests locations for leach fields and reserve leach fields which comply with all regulatory and recommended setbacks. Given appropriate design and location, the report concludes that each proposed parcel can be adequately served by individual septic systems. An addendum to the Onsite Wastewater Evaluation prepared by Pacific Watershed Associates has been prepared by LACO Associates and has been submitted to the County of Humboldt under separate cover. The addendum addresses the potential for each lot to accommodate on-site wastewater systems sufficient to support both a primary and a secondary residence as permitted by the Humboldt County Zoning Ordinance. With the exception of Lot 8 (the existing residence), the addendum concludes that all of the lots have the physical characteristics necessary to accommodate the wastewater generated by two units. A Mitigation Measure is proposed to prohibit the construction of a second unit on Lot 8 unless a subsequent study successfully demonstrates that a specific proposed on-site septic system will function appropriately.

Regional Seismicity

This project site is located within California's Northern Coast Ranges Geomorphic Province (CGS, 2002), a seismically active region in which large earthquakes are expected to occur during the economic life span (50-years) of the development.

North of the Mendocino Triple Junction (located off-shore of the town of Petrolia, approximately 50 miles south of the subject site), the regional tectonic framework is controlled by the Cascadia subduction zone (CSZ) wherein oceanic crust of the Juan de Fuca/Gorda plate is being actively subducted beneath the leading edge of the North American plate. The CSZ in its entirety extends from the Mendocino triple junction to British Columbia. Plate convergence along the Gorda segment of the CSZ is occurring at a rate of approximately 30 to 40 millimeters per year (mm/yr) (Heaton & Kanamori, 1984). Rupture along the entire CSZ boundary may produce an earthquake with a maximum moment magnitude (Mw) of 9.0 or greater (Satake, 2003).

The Trinidad fault has been recognized by the State of California as an active fault. The Trinidad fault is a northwest-striking, northeast-dipping, low-angle thrust fault. The upper-bound earthquake considered likely to occur on the Trinidad fault has an estimated maximum moment magnitude (Mo) of 7.3 (ICBO-CDMG, 1998). Peak ground accelerations (PGA) of approximately 0.6 to 0.7g (60 to 70 percent of the gravitational acceleration), or more, may be expected to occur on this site as a result of the regional design basis earthquake (Petersen et al, 1999; CGS Probabilistic Seismic Hazards Mapping Ground Motion, 2008).

• Based on the record of historical earthquakes (~150 years), faults within the plate boundary zone and internally deforming Gorda Plate have produced numerous small-magnitude and several moderate to large (i.e. M>6) earthquakes affecting the local area. Several active regional seismic sources in addition to the CSZ and Trinidad fault are proximal to the project site and have the potential to produce strong ground motions. These seismic sources include the following:

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- The northern segment of the San Andreas transform fault that represents the boundary between the stable North American plate and the northwest-migrating Pacific plate.
- The Mendocino fault, an offshore, high-angle, east-west-trending, right-lateral strike-slip fault that forms the boundary between the Gorda and Pacific plates.
- Faults within the internally-deforming Gorda plate consisting of high-angle, northeast-trending, left-lateral, strike-slip faults.

Local Seismicity

The reported trace of the Trinidad fault projects through the subject property and is mapped along the west-southwest facing toe slope of the former sea stack, as depicted on the Official Map of the State of California Special Studies Zones (CDMG, 1983; CDMG, 2000). A secondary zone of previously unmapped northeast dipping thrust faults were identified during the Fault Investigation in the trench exposures at the project site. The zone of observed faulting is present near the western boundary of the Alquist-Priolo earthquake fault hazard zone.

Conclusions (Excerpted from the LACO Fault Investigation):

- 1. Evidence of faulting was observed at the west end of Trench #3 near the westerly limits of the project site, coincident with the western boundary of the Alquist-Priolo Fault Hazard Zone. Fault offset was determined to pre-date the latest Pleistocene-aged eolian silt cap, as well as the youngest marine terrace subunit. The observed fault offset is pre-Holocene and is therefore by definition not active. However, given that this fault trace joins the main fault trace that is zoned as being active by the State 300-feet southeast of Trench #3, as well as the presence of a diffuse topographic scarp that is coincident with the cluster of observed faults, it would be prudent to locate any future occupied structures in a manner that avoids these faults.
- 2. The location of the Trinidad fault through the project site, as mapped by the State, appears to be highly speculative. We found no evidence that the topographic lineament at the base of the sea stack traversing the project site is a fault. The geomorphic expression associated with the topographic lineament is the product of slope derived colluvium overlying late Pleistocene marine sediments, or marine sediments in depositional contact with a steeply dipping bedrock free-face that represents the seaward edge of a former sea stack, as observed in Trench #5 and #5A. The fault trace is clearly not present where it is projected to cross Trench #1A, #4, #5, and #5A, as depicted by the State map.
- 3. Based on our field mapping, aerial photographic analysis and site topography, it appears that the Trinidad fault and a subsidiary fault segment are located near the western boundary of the Alquist-Priolo Fault Hazard Zone. The fault zone and associated scarp appear to traverse the project site near the southwestern property boundary, possibly coinciding with, and modified by, the lateral margin of an inset stream terrace. A subtle fault scarp is evident near the west end of Trench #3, and on the west side of Stagecoach Road where the main fault zone is projected to cross the road. The fault zone location is further evidenced by the presence of a broad anticlinal fold within the hanging wall that also projects across Stagecoach Road.

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4. In conclusion, within those areas where an absence of active faulting has been demonstrated, the potential for surface fault rupture and surface folding to affect any proposed developments not located within the exclusion area for occupied structures is considered low. It should be noted that although the potential is low, surface fault rupture can occur along any number of weak planes in the subsurface including pre-existing fractures, bedding planes, formerly inactive faults, and previously unfaulted ground.

Specific Geologic Risk Factors:

Surface Fault Rupture:

An onland segment of the Trinidad fault reportedly projects through the subject property as depicted on the Official Map of the State of California Special Studies Zones (CDMG, 1983; CDMG, 2000). Also reportedly present is a southwest dipping back-thrust, located near the easterly property boundary. A secondary zone of previously unmapped northeast dipping thrust faults were identified in the Fault Investigation. Each of the potential and identified faults has the potential to create a surface fault rupture.

Strong Seismic Ground Shaking

Based on the proximity to the identified and potential faults, the site is subject to extreme ground shaking in the event of a surface-rupturing earthquake on the Trinidad fault. All structures on the site should be engineered in such a manner as to withstand the strong ground shaking potential associated with the near-source conditions.

Seismic-related ground failure, including liquefaction

Liquefaction is the loss of soil strength, resulting in fluid mobility through the soil. Liquefaction typically occurs when uniformly-sized, loose, saturated sands or silts are subjected to repeated shaking in areas where the groundwater is less than 50-feet bgs. In addition to the necessary soil and groundwater conditions, the ground acceleration must be high enough, and the duration of the shaking must be sufficient, for liquefaction to occur.

Based on published planning maps for Humboldt County (CDMG, 1995), the site is not located in an area of liquefaction potential. The Engineering Geologic/Foundation and Soils Report found medium dense silty sands and poorly graded sands with silt and gravel. Based on the age and density of the native granular soils encountered at the site, the presence of bedrock at a depth of less than about 30-feet below the site, and the thin zone of saturation the report concludes that there is a very low probability of liquefaction to occur at this site.

Landslides

The subject parcel contains steep slopes in those areas underlain by resistant bedrock. Gradients of up to 60-percent are present along the west and south facing slopes flanking the former bedrock sea stack in the center of Lot 7. Elsewhere at the project site, slope gradients are typically gentle, ranging from five to tenpercent. The Humboldt County General Plan Geologic Map, North Sheet (2004) indicates the general area in the vicinity of the subject parcel to have a high potential for slope instability due to the proximity of unstable coastal bluffs along the coastline. The subject parcel, however, is located a minimum distance of 750-feet east from the nearest coastal bluff.

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Currently, the steep slopes flanking the former sea stack at the site are heavily vegetated with mature second growth Redwood, spruce, and fir trees. In plan view, the slopes are generally planar to convex. The Engineering Geologic/Foundation and Soils investigation did not identify any evidence of instability that would affect or be affected by the proposed developments. However, grading or development of Lot 7 is of particular concern due to the steep slopes which border the site. A geologist should be consulted during the design of grading plans, driveways, and buildings on the Lot 7. Habitable structures on Lot 7 may also be at risk from the slope instability if set too close to the grade break of steep slopes.

County standards require that road improvements be constructed to accommodate increased vehicular use resulting from a subdivision. The existing driveway which currently serves three residences will require widening to provide access to two of the proposed parcels. Extensive cuts into the hillslope or the construction of buttress engineered fills will be needed to increase the width of the traveled roadway due to the steep slopes underlain by bedrock present on the inboard and outboard edges of the current driveway alignment where it passes through Lot 7 and Lot 8.

Unstable Soils

Trench backfill was not placed as structural fill or adequately compacted for structure support. Therefore, foundation and/or appurtenant structures traversing the trench alignments may be subject to differential settlement if not mitigated.

The Geologic/Foundation and Soils identified soft soil conditions in the upper 2-feet of the soil profile, consisting of native topsoil. Below about 2-feet, soils appeared suitably dense to accommodate most foundation types. It is anticipated that future residences will be supported by foundation systems consisting of continuous perimeter spread footings and internal isolated spread footings in combination with concrete slab-on-grades. Foundation systems of this type are acceptable for site conditions, provided that all foundation elements are supported on the medium dense granular soils beginning at 2.5-feet below existing grade.

Septic Suitability

All of the subject sites are proposed to be served by individual septic systems. The On-site Wastewater Evaluation found that soils on the lower elevations of the site provide adequate percolation rates and filtration of effluent. Soils on the upper lots (Lots 7, 8 and 9) are rockier and more constrained by site topography. In all cases, there are substantial practical and regulatory constraints for the location of septic tanks and leach fields. Setbacks are required from property boundaries, existing and future wells, waterways and non-engineered grading and slope fill. (Engineered fill and non-engineered trench backfill is not subject to setbacks.). The Wastewater evaluation includes a map demonstrating that all mandatory setbacks can be met on each proposed lot, with sufficient area for both a primary and secondary leach field. In some cases, the location or size of the leach fields are such that the systems will require pressurization though elevation change or pumps to function properly.

All of the proposed lot configurations have been designed to accommodate the mandatory constraints and to provide for the required setbacks from on-site wells, property lines, building areas and Streamside Management Areas and wetlands.

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Soil Erosion

The site topography is generally level adjacent to Stagecoach Road, rising steeply to the upper portion of the site. Existing impervious surfaces are limited, consisting primarily of a single family residence, and a lengthy driveway serving the house and neighboring parcels. The driveway climbs at a relatively steep angle, along the edge of a bedrock outcropping, with a steep, vegetated cut slope on the uphill side of roadway. The existing driveway will be widened along its entire length to meet fire-safe standards. While development will increase the area of impervious surfaces on the subject site, the large lot sizes (minimum 1.07 acres) are anticipated to provide adequate area to manage the increased runoff without stormwater detention methods. Stormwater is anticipated to continue to sheet flow along the hillside and access driveway as is currently the case. No evidence of existing erosion was identified on the subject site under current conditions.

Mitigation measures are proposed to require appropriate management of drainage from the impervious surfaces of the site. Such measures include grading to direct drainage away from the structures, and the positive control of roof-generated storm drainage. Such drainage will be directed through gutters and downspouts to tightlines which will convey runoff to a suitable outlet point which will be armored against erosion. All runoff from impervious surfaces will be directed to drywells and/or gravel infiltration galleries. In addition to the prevention of erosion, such measures will have the added benefit of encouraging groundwater recharge.

Expansive Soils

The Engineering Soils report found that the subsurface soils at foundation load bearing depths consist predominantly of medium dense silty sand grading downward into poorly graded sand with silt and gravel. Particle size analysis of selected samples indicate a clay content of less than 16-percent for soils at or below anticipated foundation load bearing depths. This indicated that there is a low hazard to the structure associated with potential swelling or shrinkage of these soils beneath a slab-on-grade with thickened edge foundation.

All lot configurations have been carefully designed to work within the geological, seismic and soils constraints identified above and to provide required setbacks from (and between) property lines, fault lines, building pads, existing and proposed wells, existing and proposed septic systems and leach fields, Streamside Management Areas and wetlands.

MITIGATION MEASURE NO. 9

All proposed occupied structures shall be located outside of the Exclusion Area identified in the Alquist-Priolo Fault Investigation (Appendix A). Note that subsequent Fault Investigations conducted pursuant to the Alquist-Priolo Act may reduce the exclusion areas. An occupied structure is defined by the Alquist-Priolo Act as "any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year".

The angle points of the Exclusion Area shall be staked in the field such that they are clearly defined and recognizable to any future owner(s). Intermediate points shall be staked where inter-visibility between angle points does not exist. The Exclusion Area shall be clearly depicted on the Tentative and/or Final Subdivision Map, to be recorded following County approval of this project. Coordinates of the angle points are to be determined and located in relation to the monumented property corners recovered during the boundary survey.

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MITIGATION MEASURE NO. 10

A site-specific slope stability investigation shall be performed by a qualified Professional Geologist prior to siting of any occupied structures on Lot 7 due to the precipitously steep and potentially unstable slopes that may be construed as buildable due to their location outside the Exclusion Area. A minimum setback of 20 feet from the grade break of a descending slope in excess of 50% shall be maintained for all occupied structures.

MITIGATION MEASURE NO. 11

Prior to placing a permanent foundation across the uncompacted backfill within the exploratory trenches as shown on the Exclusion Zone Map (Appendix A), a licensed professional engineer shall provide either 1) A design for the re-excavation and replacement of backfill with an engineered, compacted fill, or 2) a design an appropriately engineered foundation to mitigate the potential for settlement. Where (or if) trenches closely parallel a footing, and the trench bottom is within a 2 horizontal to 1 vertical plane, projected outward and downward from any structural element, concrete slurry should be utilized to backfill that portion of the trench below this plane. The use of slurry backfill is not required where a narrow trench crosses a footing at or near a right angle.

MITIGATION MEASURE NO. 12

All permanent construction on the subject site shall be designed and constructed to State Title 24 standards for Seismic Zone 4.

MITIGATION MEASURE NO. 13

Prior to the start of any construction which will occur during wet weather conditions, an erosion prevention and control plan shall be prepared and submitted to the Humboldt County Building Division for review and approval.

MITIGATION MEASURE NO. 14

New cut slopes into bedrock, shall have a maximum gradient of 1:1 (horizontal to vertical) similar to the current cut slope geometry. New cut slopes into the marine sands or colluvial deposits shall have a maximum gradient of 1.5:1 (horizontal to vertical). Steeper cuts may be feasible if site specific stability analysis is performed by a qualified licensed engineer.

New engineered fill slopes shall be constructed on an adequately prepared surface that has been stripped of deleterious material, and benched to provide to a stable level surface on which to place the fill. The finished fill slope shall have a maximum gradient of 2:1 (horizontal to vertical) unless special design considerations such as reinforced earth or cantilevered concrete retaining structures are recommended and designed by a qualified licensed engineer.

MITIGATION MEASURE NO. 15

All structural fills shall be constructed as controlled and compacted engineered fills. Structural engineered fills shall be free of organics and composed of sand or gravel. All existing soils with a high organic content derived from stripping of the site, are suitable for reuse as landscape fills only. Only granular fill shall be used for supporting roadways or building foundations.

All structural fill material shall be well graded, imported granular material such as crushed quarry rock or river-run gravels (100-percent passing 3-inch sieve). Native soils on the site may not be suitable for use as structural fill, but may be usable if they are moisture conditioned to optimum moisture content and analyzed by a qualified materials testing laboratory prior to use. Sufficient testing and inspection shall be performed to monitor the suitability of fill materials, and assure compliance with the recommended compaction standards.

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MITIGATION MEASURE NO. 16

All topsoil shall be removed from areas that will support slab-on-grade foundations. Where excessive amounts of unsuitable soft soils or woody debris are encountered the unsuitable material shall be over-excavated and replaced with suitable engineered fill, placed and compacted pursuant to adopted standards. Alternatively, footings may be built on concrete slurry backfilled footing trenches, excavated to the bearing soil depth. Other potentially-acceptable methods for foundation support include drilled cast-in-place piers or helical piers. Any such alternative approach shall be designed and approved by a qualified, licensed engineer.

MITIGATION MEASURE NO. 17

The site shall be graded to provide positive drainage away from the foundation elements of all structures. A minimum gradient of one percent shall be maintained for all hardscaped areas. A three percent gradient shall be maintained for landscaped areas within 10-feet of a structure. The grading or landscaping design and construction shall be such that no water is allowed to pond anywhere on the site, nor to migrate beneath any structures. All roof storm drainage shall be controlled with the installation of gutters and downspouts. Downspouts shall be connected to tightlines to convey roof storm runoff away from a structure to a suitable outlet point. All outlet points should be armored with rock to act as energy dissipaters and control soil erosion. Runoff from hardscaped areas, including patios, and other impermeable surfaces shall also be contained, controlled and collected, and tight-lined to a suitable outlet point consisting of a drywell and/or gravel infiltration gallery.

MITIGATION MEASURE NO. 18

The septic system for Lots 2, 7, 8 and 9 shall incorporate shallow Low-Pressurized Pipe (LPP) distribution systems to accommodate subsurface soil conditions, setbacks, and topographical constraints.

MITIGATION MEASURE NO. 19

Septic Systems and leach fields shall be designed and located in conformance with the standards of the Humboldt County Department of Environmental Health. Such standards include, but are not limited to the following:

- Leachfields must be setback 100 feet or more from any existing and/or future wells, perennial springs, ponds, watercourses and outside of any designated Stream Management Areas.
- All leachfields must maintain a minimum 50 foot setback from all existing and proposed property lines.
- Leachlines must be setback 50 feet or greater from any non-engineered fill slopes (excepting trench backfills) and 25 feet or more from any break in slope over 30 percent or any cutbanks 3 feet in height or greater.
- Leachlines must be setback 25 feet or more from any open drainage ditch.
- Leachfields must be setback 10 feet or greater from the septic tanks and dosing chambers or from the foundation of any structure.
- Leachfields must be installed on contour and smeared soil on leach trench walls shall be raked.
- Leachfields shall be installed during the dry season to avoid soil compaction.
- Septic tanks and dosing chambers must be setback 50 feet or more from any wells, perennial springs, ponds, or watercourses and setback 5 feet or more from the permanent foundation of any buildings.
- All surface drainage shall be directed away from all components of the proposed on-site wastewater treatment system.

MITIGATION MEASURE NO. 20

No second unit shall be authorized or constructed on Lot No. 8 unless an on-site wastewater suitability study is prepared to demonstrate that a specific septic system design will function appropriately to accommodate the additional wastewater on site.

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
7. HAZARDS AND HAZARDOUS MATERIALS. Would the pro-				
ject:	_	_	_	_
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazard-ous materials?				×
b) Create a significant hazard to the public or the environ- ment through reasonably foreseeable upset and accident condi- tions involving the release of hazardous materials into the en- vironment?				×
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				×
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				×
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				×
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or				×
working in the project area? g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				×
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			×	

Poten-	Potentially	Less	
tially	Significant	Than	No
Signifi-	Unless	Signifi-	Im-
cant	Mitigation	cant	pact
	Incorp.	Impact	-

7. HAZARDS AND HAZARDOUS MATERIALS

<u>Finding</u>: The project will not create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; will not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project will create a less than significant hazard through the exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

<u>Discussion</u>: The project site is a residential subdivision and will not routinely transport, use, or dispose of hazardous materials. The site is not located within and airport land use plan, and there are no private airstrips in the vicinity of the site. The Department finds no evidence that the creation of eight additional residential lots will create, or expose people or property to, hazardous materials, or impair implementation of, or physically interfere with, an adopted emergency response plan.

According to the Fire Hazard map, the parcel is located in a moderate fire hazard area and the project is located within the State Responsibility Area (SRA) for fire protection. The existing site includes areas of substantial vegetation, presenting a risk of wildfire if not properly maintained.

Fire service to the area is provided by Calfire and the Fire District for the site is County Service Area # 4. The nearest Fire Station is the Calfire Trinidad station on Patrick's Point Road, approximately 0.8 miles from the subject site, with a modeled response time of three minutes (pursuant to the Humboldt County Master Fire Protection Plan). The Calfire Trinidad Station and Dispatch Center are open year round. The objective for Calfire is to successfully contain 95 percent of wildfires within the State Responsibility Area and Direct Protection Area at 10 acres or less. Additional protection is available from the Trinidad Volunteer Fire Department through a mutual aid agreement with Calfire. The Trinidad Fire Station is located approximately 1.6 miles from the site.

New development on the subject site will be subject to the Humboldt County Fire Safe Regulations. Such regulations are intended to reduce the potential for wildland fires to spread through areas where residences are intermixed with wildlands. The Regulations include, but are not limited to the following:

- Minimum width for roadways serving nine or more parcels is 18-20 feet
- Minimum width for roadways serving three to eight parcels is 16 feet
- Minimum width for roadways serving two parcels is 12 feet
- Mandatory street sign and house numbering standards

Poten-	Potentially	Less	
tially	Significant	Than	No
Signifi-	Unless	Signifi-	Im-
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- Minimum 2,500 gallon emergency water supply for each residence
- Minimum 30 foot setback for all parcels greater than one acre
- Guaranteed maintenance of required facilities through the use of County Service Areas, maintenance associations, etc.

As proposed, the project complies with the requirements of the Fire Safe Regulations. The access road to Lots 7, 8 and 9 will be widened to meet the minimum travel width over its entire length. As shown on Page 4 of 6 of the proposed Tentative Map, the project design includes an emergency vehicle turnaround between Lots 7 and Lot 9 to meet Fire Safe Regulations and the standards of the California Department of Forestry. A vehicle turnout is proposed on the east side of the access road along Lot 5 to permit facilitate emergency vehicle access.

Two foot graded shoulders are provided except for a relatively short section where such shoulders are infeasible due to the topography of the roadway and the adjacent bedrock outcropping. The tentative map demonstrates buildable areas on each lot while providing a 30 foot minimum setback from property lines and showing the potential location of a 2.500 gallon emergency water tank. A property owners association is proposed to be created as part of the subdivision to ensure continued maintenance of the access road.

Based on continued compliance with the Humboldt County Fire Safe Regulations the potential hazard from wildland fires is less than significant.

O			
8. HYDROLOGY AND WATER QUALITY. Would the project: a) Violate any water quality standards or waste discharge requirements?	×		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?		×	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		×	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding onor off-site?		×	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		×	
f) Otherwise substantially degrade water quality? g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			×
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			×

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
i) Expose people or structures to a significant risk of loss, in-				×
jury or death involving flooding, including flooding as a result				
of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow?				×

8: HYDROLOGY AND WATER QUALITY

Finding: The project will not place housing within a 100-year flood hazard areas as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map, will not place within a 100-year flood hazard area structures which would impede or redirect flood flows, will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam or inundation by seiche, tsunami, or mudflow. The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; nor substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. The project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality. The project will not violate water quality standards, waste discharge requirements or otherwise substantially degrade water quality, provided appropriate mitigation measures are applied.

Discussion:

Flooding

The subject site is not located within a 100-year flood hazard area as shown on the Federal Emergency Management Agency's Flood Insurance Rate Map (FIRM) and no development is proposed to within 100 feet of the on-site stream. The project site is not within a mapped dam or levee inundation area, and is outside the areas subject to tsunami run-up. The lowest portions of the site are at ±160' elevation.

Groundwater supply and groundwater recharge:

The project proposes to supply domestic water to all nine Lots sites with individual domestic wells as follows: Each of the wells has been developed as described for testing purposes, and is available for domestic use. Well No. 1, located on proposed Lot No. 1 will serve proposed Lots 1, 4, 7 and 9. Well No. 2 on proposed Lot No. 2 will serve proposed Lots 2 and 3. Well No. 4 is located on proposed Lot No. 5 and will serve only that lot. Well No. 5 is located on proposed Lot 6 and will serve only that lot. The existing residence on proposed Lot No. 8 will continue to be served by an existing well on proposed Lot No. 5.

Poten-	Potentially	Less	
tially	Significant	Than	No
Signifi-	Unless	Signifi-	Im-
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The applicant has submitted a report prepared by LACO Associates titled Aquifer Test Results for Domestic Wells DW-1 Through DW-6. The report contains the results of the aquifer testing conducted at the subject parcel during the Humboldt County dry-weather testing period in 2008. Six drawdown production tests were conducted simultaneously on six water wells between September 30 and October 1, 2008. A subsequent single well test was performed for DW-1 on October 5 and 6, 2008. The production tests were conducted in accordance with Humboldt County Division of Environmental Health policies. The purpose of the test was to provide information on the following: 1) individual well performance including the available production rate of each individual water well; 2) determine the aquifer response to groundwater withdrawal; 3) monitor effects pumping may have on water-level changes in a neighboring well located on APN 515-191-013; 4) monitor potential water-level changes within the stream which runs across proposed Lot No. 5 and 5) quantify the available production rate of the individual water wells to assess each well's capacity to supply future individual residences at the subject property with the minimum required water supply of 0.5 gallons per minute (gpm). The pumping tests were performed by simultaneously pumping each well at a high rate to initiate rapid drawdown of the water surface to the approximate base of the saturated zone within the unconfined aguifer. The pumping rate was then decreased until no additional drawdown occurred. This established the pumping rate available at each well without causing sustained drawdown of the aquifer.

The report concludes that sufficient water is available to supply a minimum of 21 dwelling units and a maximum of 27 dwelling units without causing sustained reduction in the local aquifer. Testing indicated that drawdown of on-site monitoring wells ranged from 0.1-feet to 0.14 feet. Drawdown in creekside observation wells was a maximum of 0.01 feet. No drawdown was observed in the neighboring well.

Drainage and Erosion

The predominant source of runoff on the property consists of precipitation that falls on the site. Although the on-site stream drains additional areas upstream of the property, the creek does not contribute additional run-on to the site outside of its banks. Drainage of the lower portions of the site generally flows west toward Stagecoach Drive and south toward the on-site stream. Drainage from the upper portions of the site generally flows southward until it is intercepted by Anderson Lane or westward until it is intercepted by the existing driveway. Portions of the drainage reaching the driveway appear to continue across the driveway, flowing westerly onto the lower portions of the site. The remainder of the drainage from upper portions of the site follows the driveway to Anderson Lane, and into the wetland area of the site southeast of Anderson Lane. A small area of the upper portion of the site drains northeasterly to neighboring parcels.

Existing impervious surfaces are limited, consisting primarily of a single family residence, and a driveway serving the house and neighboring parcels. The driveway is approximately 1,300 feet in length ad 12 to 15 feet in width and climbs at a relatively steep angle, along the edge of a bedrock outcropping, with a steep, vegetated cut slope on the uphill side of roadway. The existing driveway will be widened along its entire length to meet fire-safe standards. While development will increase the area of impervious surfaces on the subject site, the large lot sizes ranging in size from 1.13 acres to 3.70 acres (average size of 2.1 acres) are anticipated to provide adequate area to manage the increased runoff without stormwater detention methods. Stormwater is anticipated to continue to sheet flow along the hillside and access driveway as is currently the case. No evidence of existing erosion was identified on the subject site under current conditions.

Poten-	Potentially	Less	
tially	Significant	Than	No
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The project site is subject to the regulations of the Federal Water Pollution Control Act, also referred to as the Clean Water Act (CWA), as amended to establish that the discharge of pollutants to waters of the United States was effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Under the federal regulations, two options are allowed for permitting storm water discharges, individual and general permits. In California, the State Water Resources Control Board (SWRCB) elected to adopt general permits for municipalities, industrial facilities, and construction activities. In addition to NPDES permit requirements, the nine Regional Water Quality Control Boards (RWQCBs) in California have developed basin plans for protecting water quality in regional drainage basins. For the subject property, construction activities associated with the proposed residential developments may require compliance with the general permit for small construction activities (Order No. 99-08-DWQ). Small construction activities are defined as clearing, grading, or excavating activities that result in land disturbance between 1 and 5 acres; or activities that result in soil disturbances of less than one acre but are part of a larger common plan of development that encompasses one or more acres of soil disturbance. Compliance with the general permit during construction activities requires the following:

- developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) for preventing pollutants from contacting with storm water and controlling erosion during construction activities,
- eliminating or reducing non-storm water discharges to storm sewer systems or other waters of the nation, and
- conducting BMP inspections.

The monitoring and reporting requirements for the general permit also include sampling and analysis requirements for direct discharges of sediment to waters impaired due to sediment and for pollutants that are not visually detectable in runoff that could cause or contribute to an exceedance of water quality objectives. Implementation of the three items listed above, reduces potential impacts on water quality standards or waste discharge requirements to less than a significant impact.

Water Quality Standards:

All of the subject sites are proposed to be served by individual septic systems and on site wells. There are substantial practical and regulatory constraints for the location of wells, septic tanks and leach fields. Leach field setbacks are required from property boundaries, existing and future wells, waterways and non-engineered grading and slope fill. (Engineered fill and non-engineered trench backfill is not subject to setbacks.). The Onsite Wastewater Evaluation prepared for the project by Pacific Watershed Associates, and amended by LACO Associates includes a map demonstrating that all mandatory setbacks can be met on each proposed lot, with sufficient area for both a primary and secondary leach field. With the exception of Lot 8 (the existing residence), the addendum concludes that all of the lots have the physical characteristics necessary to accommodate the wastewater generated by two units. All proposed on-site wells and septic systems will be installed and operated pursuant to Humboldt County Department of Environmental Health regulations

Mitigation Measures:

MITIGATION MEASURE NO. 18 (See Geology and Soils, above) addresses development standards for septic systems and is sufficient to reduce the potential impact to groundwater and surface water quality to less than significant.

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
9. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?			×	
b) Conflict with any applicable land use plan, policy, or regu-			×	
lation of an agency with jurisdiction over the project (including,				
but not limited to the general plan, specific plan, local coastal				
program, or zoning ordinance) adopted for the purpose of				
avoiding or mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or			×	
natural community conservation plan?				

9: LAND USE AND PLANNING

<u>Finding</u>: The project will not physically divide an established community; will not significantly conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and will not conflict with any applicable habitat conservation plan or natural community conservation plan.

Discussion:

The subject parcel has a General Plan designation of Rural Residential (RR) and is included in the area guided by the Trinidad Area Plan (TAP). The residential density established by the General Plan is 0 – 1 unit per 2 acres. The site is zoned for Rural Residential Agriculture (RA) with a 2-acre minimum parcel size, with combining zones for Design Review (D), Alquist-Priolo Fault Hazard (G), and Manufactured Homes (M). Most parcels in the vicinity are developed with a single family residence. A small hotel (cabins, restaurant and bar) and a mobilehome park are located along Patricks Point Road to the east of the site. Trinidad State Beach is located across Stagecoach Road to the west of the subject site. Public facilities and general commercial uses are available in the City of Trinidad, to the south of the subject site. Excepting the parcels which comprise the State Park, the average parcel size within ¼ mile of the subject site is approximately 2.5 acres with a minimum parcel size in that area of 0.1 acres and a maximum (excluding the subject site) of 13.0 acres.

The applicant proposes to subdivide the 19 acre property into nine parcels ranging in size from 1.13 acres to 3.7 acres. The average lot size is approximately 2.1 acres. A lot size exception will be required by per §313-99 of the Humboldt County Code. That section permits a reduction in minimum lot sizes where the overall density is maintained and where topography or other special circumstances imposes limitations on lot design. The Department of Environmental Health has submitted a letter indicating that the lot sizes as proposed would be acceptable provided the applicant can demonstrate conformance with the setbacks for individual wells and septic systems. The lot sizes and single family residential use of the proposed parcels is consistent with §3.21 Rural Developments Subdivision Requirements 30250(a) of The Humboldt County General Plan, Trinidad Area Plan of the Humboldt County Local Coastal Program (LCP). Additionally, as required by the Humboldt County Coastal Zoning Regulations, at least 50 percent of the surrounding parcels in the same zone and planning area must be developed with a permitted main building in order for the proposed subdivision to be consistent with current levels of development. Approximately 70% of surrounding parcels have been developed.

Based on the above, staff concludes that the project is consistent with the Trinidad Area Local Coastal Plan and the Humboldt County Code and that there are no adverse impacts or conflicts between the proposed project and the existing general plan land use and zoning designations.

10. MINERAL RESOURCES. Would the project:

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				×
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				×
10: MINERAL RESOURCES Finding: The project will not result in the loss of availability of a know value to the region and the residents of the state; and will not result important mineral resource recovery site delineated on a local general plan.	in the los	s of availab	ility of a l	ocally-
<u>Discussion</u> : The project does not involve extraction of mineral resouradjacent to, a locally important mineral resource recovery site deline plan or other land use plan. The Department finds there is no eviden nificant adverse impact on mineral resources.	ated on a	a local gener	ral plan, s	pecific
11. NOISE. Would the project result in:a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise			×	
ordinance, or applicable standards of other agencies? b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			×	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			×	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			×	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				×
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project				×

11: NOISE:

area to excessive noise levels?

<u>Finding</u>: The project will not result in a substantial exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; will not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; will not permanently increase in ambient noise levels in the project vicinity above levels existing without the project. The project is located within an airport land use plan but will result in a less than significant noise impact for people residing or working in the project area in terms of the nearby public airport. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or for a project within the vicinity of a private airstrip, the project will not expose people residing or working in the project area to excessive noise levels.

		Poten- tially Signifi- cant	Potentially Significant Unless Mitigation	Less Than Signifi- cant	No Im- pact	
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×

×

×

<u>Discussion</u>: The site is located approximately 1/3 mile north of the City of Trinidad, on the east side of Stagecoach Road and north of Anderson Lane. This area varies from moderately forested to densely vegetated and consists of rural residential housing with an adjacent state park and minor amount of commercial development (hotel, restaurant and bar). The lot sizes within ½ mile of the subject site range from 0.1 acres to 19.0 acres with an average of approximately 2.5 acres. None of the adjacent uses are anticipated to generate excessive noise which would impact future residents of the proposed development. While the adjacent uses include Trinidad State Beach, which may be particularly sensitive to noise, there is no evidence that the project will generate noise in excess that typical for rural residential single family residential uses. Therefore, the proposed project will not result in a substantial permanent increase of ambient noise levels.

Construction activities may include the use of heavy equipment potentially including excavators, back-hoes and heavy trucks and other equipment that are known to produce substantial noise. Construction activities could cause short-term deterioration of ambient noise levels in the immediate vicinity of the project. There are no special soil or site conditions on site which are anticipated to require pile driving or other ground-borne vibration generators to be used in constructing the project. Increases in construction related noise above ambient levels will be short-term and temporary. All construction activities on the subject site will be required to conform to County standards which limit noise generating activities to daytime hours, with greater restrictions on Saturdays and Sundays. The Department finds no evidence that the creation of the new parcels will be inconsistent with the planned build-out of the area or result in a significant adverse noise impact.

The proposed project is approximately 5.5 miles north of the nearest airport or airstrip (the Arcata/Eureka Airport) and is not within an airport land use plan.

12. POI	PULATION AND HOUSING. Would the project:
a)	Induce substantial population growth in an area

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Poten-	Potentially	Less	
tially	Significant	Than	No
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cant	Mitigation	cant	pact
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×

12: POPULATION AND HOUSING

<u>Finding</u>: The project will not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Discussion: The proposed project will create eight additional lots for residential development. All nine of the resulting parcels will include one single-family residence, at a location and density supported by the Trinidad Area Plan component of the Humboldt County General Plan. Secondary units may also be constructed on each of the proposed parcels in conformance with the Humboldt County Zoning Ordinance. Additional study would be required to demonstrate the availability of an appropriate site for an individual septic system prior to the construction of a secondary unit on proposed Parcel 8. The County's Housing Element also supports the development of single-family residential uses are compatible with the land use designation and zoning district. The Humboldt County General Plan and Zoning Ordinance have anticipated the eventual development of Rural Residential uses on the subject site since 1972 or earlier. The proposed subdivision will not result in displacing existing housing or result in the displacement of people. The Department finds no evidence that the project will result in a significant adverse impact on population and housing.

13. PUBLIC SERVICES.

ii. Other public facilities?

ter	ed governmental facilities, the construction of which could			
caı	use significant environmental impacts, in order to maintain			
acc	ceptable service ratios, response times or other performance			
ob	ectives for any of the public services:			
i.	Fire protection?		×	
i.	Police protection?		×	
i.	Schools?		×	
i.	Parks?		×	

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically al-

Poten-	Potentially	Less	
tially	Significant	Than	No
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13: PUBLIC SERVICES

<u>Finding</u>: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, other public facilities.

<u>Discussion</u>: There is no indication that the proposed subdivision will result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. The subject site will continue to receive services as follows:

Fire Protection: California Department of Forestry (CDF), Trinidad Station

Police Service: Humboldt County Sheriff Schools: Trinidad Union School District

Parks: Humboldt County and State of California

Referral comments and the LUD's requirements for improvements will ensure that the project's impacts to fire and police protection, schools, parks and other public facilities are minimized.

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
14. RECREATION				
a) Would the project increase the use of existing neighbor- hood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would oc- cur or be accelerated?			×	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				×
14: RECREATION A) AND B) <u>Finding</u> : The project will not include recreational facilities or requrecreational facilities which might have an adverse physical effect or			or expans	sion o

<u>Discussion</u>: The subject property is zoned and planned for residential uses. The addition of eight new parcels that will eventually have single-family residences on them is not expected to result in a significant increase in the use of the existing neighborhood or regional parks. The proposed project does not include new recreational construction or expansion of existing recreational facilities. The Department finds no evidence that the project will require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
15. TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of ve- hicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			×	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			×	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				×
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				×
e) Result in inadequate emergency access?			×	
f) Result in inadequate parking capacity?				×
g) Conflict with adopted policies, plans, or programs sup-				×
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porting alternative transportation (e.g., bus turnouts, bicycle racks)?

15: TRANSPORTATION/TRAFFIC

Finding: The project will not cause a substantial increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); will not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways and will not result in inadequate emergency access. The project will not result in a change in air traffic patterns, substantially increase hazards due to a design feature; will not result in inadequate parking capacity; and will not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Discussion: The Institute of Traffic Engineers (ITE) Trip Generation manual (7th ed) reports an average trip generation for single family detached housing of 9.57 trips per residence per day, with 0.75 trips per residence occurring during the AM Peak and 1.01 trips per residence occurring in the PM Peak. Assuming a maximum buildout of one primary and one secondary residence per parcel (with the exception of Parcel 8, which is already developed), the project would generate a maximum of 134 trips per day, of which 10.5 trips would occur during the AM Peak and 14.1 would occur during the PM Peak. The project will take access from existing County roads on Stagecoach Lane and Anderson Lane. While both roads are somewhat underdeveloped as compared to typical County roads, traffic on both is relatively light and both have sufficient capacity to accommodate an the additional traffic anticipated to be generated by the proposed project. Proposed Parcels 1 and 2, and Proposed Parcels 3 and 4 will utilize shared access driveways onto Stagecoach Lane. Proposed Parcels 5, 6, 7 and 9 will take access from Anderson Lane via the existing private drive which currently serves the residence on Proposed Parcel 8 and neighboring properties.

By creating opportunities for shared access to Stagecoach Lane and Anderson Lane, the project eliminates the potential for back-in access from individual driveways and reduces the potential for turnmovement conflicts at multiple driveways. The requirement to improve the existing driveway sufficiently to meet the State and County Fire Safe regulations will improve traffic safety along that facility sufficiently to accommodate the proposed new development.

The nearest airport is the Arcata/Eureka Airport, approximately 5.5 miles south of the subject site. Proposed access it to existing County roads with no change to design, or design related hazards. On site parking will be required pursuant to County of Humboldt standards for single family residences. As the project is a large lot, rural residential development, no alternative transportation policies apply.

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pact
16. UTILITIES AND SERVICE SYSTEMS Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			×	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			×	

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		×	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		×	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			×
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	×		
g) Comply with federal, state, and local statutes and regulations related to solid waste?	×		

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Homan, John and Katrin

16: UTILITIES AND SERVICE SYSTEMS

<u>Finding</u>: The project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; or require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. There are sufficient water supplies available to serve the project from existing entitlements and resources and new or expanded entitlements are not needed. The project will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and will comply with federal, state, and local statutes and regulations related to solid waste provided appropriate mitigation measure are applied.

Discussion:

The newly created parcels will be served by on-site sewage disposal systems. An on-site septic wastewater disposal feasibility investigation has been conducted by Pacific Watershed Associates for the subject property. The subsurface investigation found that soils on site provide adequate percolation rates and filtration of effluent. They are suitable for use of a conventional system, however, as described in the Geology and Soils Section and the Hydrology and Water Quality Section above, some parcels on the site are sufficiently constrained by soil type, or size and location of leach fields as to require the use of a pressurized leach field system. Proposed parcel 8 is currently developed with an on-site sewage disposal system. As the project will rely on individual septic systems, the project will not affect any wastewater treatment service providers.

The proposed project will increase the impermeable surfaces of the subject site through the construction of driveways, the widening of the on-site private drive, and the construction of single family residences; however, as all of the sites are a minimum of one acre, the ratio of impermeable surfaces will remain low. The R-1 Soils Report prepared for the project identifies on site soils on site as well drained and pervious, indicating that maintenance of existing sheet flow drainage patterns on the site will be sufficient to accommodate any increased runoff from new impervious surfaces without requiring the construction of new private or public storm drainage facilities.

Sufficient water supplies are available to serve the proposed development as described in the LACO Aquifer Test Results for Domestic Wells Report (2008), described in detail in the Hydrology section, above. No new water rights or authorizations are required to serve the site with domestic wells, and the report indicates that such wells can operate without detriment to the local aquifer or neighboring wells.

The solid waste provider is the Humboldt Waste Management Authority (HWMA). The HWMA has formulated a joint powers agreement with the County and most of the incorporated cities within the County for the disposal of waste. The HWMA has contracted with ECDC Environmental to ship solid waste produced in the County to state licensed land fills located outside of Humboldt County. Currently solid waste is trucked to Medford, Oregon to a new tripled line state licensed landfill. Ultimately, solid waste will be shipped by rail to the State licensed Potrero Hills landfill in Solano County. Both of these landfills have excess capacity and can accept the minimal amount of waste generated by this project. Solid waste will be collected and transferred to the HWMA transfer station for shipment to one of the landfills discussed above. The amount of solid waste generated by project will not significantly contribute to the waste stream volumes transferred out of the County, and based on information from the Potrero Hills landfill and the Medford, Oregon landfill, the project will not cumulatively result in amounts of waste that exceed the capacity of either landfill. Therefore, staff believes that, following construction, the project will not be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

Construction waste presents additional challenges if not managed properly. Poorly managed or maintained job sites have the potential to contribute to erosion, water quality degradation and dispersal of waste to other parcels during rain or high wind conditions.

MITIGATION MEASURE NO. 21

The applicant shall assure that no construction materials, debris, or waste will be placed or stored where it may be subject to precipitation erosion and dispersion.

MITIGATION MEASURE NO. 22

Future residential uses shall comply with all applicable regulations for solid waste disposal and temporary storage to the satisfaction of the Humboldt Waste Management Authority (HWMA), California Coastal Commission, and Humboldt County Health Department.

	Poten- tially Signifi- cant	Potentially Significant Unless Mitigation Incorp.	Less Than Signifi- cant Impact	No Im- pac
17. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				×
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either di- rectly or indirectly?				×

17: MANDATORY FINDINGS OF SIGNIFICANCE

<u>Finding</u>: The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of

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California history or prehistory; or have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

<u>Discussion</u>: Based on the project as described in the administrative record, comments from reviewing agencies, a review of the applicable regulations, and discussed herein, the Department finds there is no evidence to indicate the proposed project:

- Will have the potential to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, threaten to eliminate a plant or animal community or eliminate important examples of the major periods of California history or pre-history;
- Will have the potential to achieve short-term to the disadvantage of long-term environmental goals;
- Will have impacts that are individually limited but cumulatively considerable; or
- Will have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

17: b) MANDATORY FINDINGS OF SIGNIFICANCE: LESS THAN SIGNIFICANT IMPACT

<u>Finding</u>: The project could have impacts that are individually limited, but cumulatively considerable. ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).

<u>Discussion</u>: Any discretionary land use permit could be considered to have effects that are cumulatively considerable as development of all types continues as described in the General Plan. However, the cumulative effects of a 9-parcel subdivision to facilitate rural residential in an area where appropriate services for such a use are available, and appropriate General Plan and Zoning designations in place are not considered to be significant.

19. DISCUSSION OF MITIGATION MEASURES, MONITORING, AND REPORTING PROGRAM The following table lists the required mitigation measures, including the method of verification, monitoring schedule, and the responsible party.

20. EARLIER ANALYSES

Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 16063(c)(3)(D). In this case a discussion should identify the following on attached sheets:

a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

The Humboldt County General Plan and Trinidad Area Plan and their respective CEQA reviews set the context for consideration of the project and its impacts and established appropriate development types and densities and are on file with HCCDS. However, this is an independent Initial Study of site and development specific impacts and is not tiered from either document.

- b) Impacts adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects ere addressed by mitigation measure based on a the earlier analysis. N/A
- c) Mitigation measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project. N/A

SOURCE/REFERENCE LIST: The following documents were used in the preparation of this Initial Study. The documents are available for review at the Humboldt County Community Development Department during regular business hours.

- County of Humboldt, Departments of Community Development Services and Public Works. (June 2002). Grading, Erosion Control, Geologic Hazards, Streamside Management Areas, and Related Ordinance Revisions. Eureka: County of Humboldt, Departments of Community Development Services and Public Works.
- County of Humboldt. (June 1995). "Trinidad Area Plan of the Humboldt County Local Coastal Program," Humboldt County General Plan, Volume 2. Eureka: Humboldt County Planning Department.
- Winzler & Kelly Consulting Engineers (November, 2008). Terrestrial Vertebrate Survey for the Proposed Homan Development Project, Humboldt County, California
- Winzler & Kelly Consulting Engineers (November, 2008). Homan Proposed Development Plan APN #515-191-037 Special Status Plant Survey Results
- Winzler & Kelly, Consulting Engineers (April, 2008). Stream Transition Line and Wetland Delineation on Assessor's Parcel #515-191-018 [sic] 101 Anderson Lane, Trinidad, Humboldt county, California
- LACO Associates Consulting Engineers (December, 2008). Alquist-Priolo Fault Investigation, Proposed Major Subdivision, 101 Anderson Lane, Trinidad, Humboldt County, California, Assessor's Parcel Number 515-191-037.
- LACO Associates Consulting Engineers (December, 2008). R-1 Engineering Geologic/Foundation and Soils Report, Proposed Major Subdivision, 101 Anderson Lane, Trinidad, Humboldt County, California, Assessor's Parcel Number 515-191-037.
- LACO Associates Consulting Engineers (December 2008). Aquifer Test Results for Domestic Wells DW-1 through DW-6, Proposed Major Subdivision, 101 Anderson Lane, Trinidad, Humboldt County, California, Assessor's Parcel Number 515-191-037
- Pacific Watershed Associates, (February, 2009). Onsite Wastewater Evaluation For The Subdivision of A.P. No.: 515-191-037 Located at 101 Anderson Lane, Trinidad, California.
- LACO Associates Consulting Engineers (June, 2009). Addendum to Pacific Watershed Associates Onsite wastewater Evaluation For The Subdivision of A.P. No.: 515-191-037 Located at 101 Anderson Lane, Trinidad, California.

Mitigation Measures, Monitoring, and Reporting Program (MMRP)

MITIGATION MEASURE NO. 1

A maximum of two new driveway access points will be permitted from Stagecoach Road to serve the proposed development. All new driveways will be designed to meander to avoid existing vegetation to the greatest extent possible, with a priority placed on the preservation of existing mature trees.

<u>Timing for Implementation/Compliance</u>: Proposed Driveway access points shall be shown on Tentative and Final Maps and on the Development Plan that are approved by the HCCDS.

<u>Person/Agency Responsible for Monitoring</u>: Applicants

Monitoring Frequency: Once to review plans; once to assure compliance

Evidence of Compliance: Visible evidence

MITIGATION MEASURE NO. 2

A 50 foot wide landscape buffer shall be maintained along Stagecoach Road, and shown on the face of the Final Map or in an accompanying exhibit. No buildings will be permitted in this buffer. All trees with a diameter at breast height (dbh) greater than six inches, with the exception of hazard trees as identified by a qualified forestry professional or arborist shall be retained in the landscape buffer area.

<u>Timing for Implementation/Compliance</u>: The landscape buffer shall be shown Tentative and Final Maps and on the Development Plan that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, HCCDS

Monitoring Frequency: Once to review plans; once to assure compliance

Evidence of Compliance: Visible evidence. Reviewed under any future development proposal.

MITIGATION MEASURE NO. 3

Lighting shall be fully shielded away from nearby residences and roadways (County & private) to minimize off-site light and glare effects. In addition, no portion of the illuminated fixture or lens shall extend below or beyond the canister or light shield.

<u>Timing for Implementation/Compliance</u>: The lighting specifications shall be shown on the construction plans that are approved by the HCCDS

Person/Agency Responsible for Monitoring: Applicants

<u>Monitoring Frequency</u>: Once to review plans; once to assure compliance. Reviewed under any future development proposal.

Evidence of Compliance: Visible evidence

MITIGATION MEASURE NO. 4

The applicant, at all times, shall comply with Air Quality Rule 104, Section 4.0 Fugitive Dust Emissions to the satisfaction of the NCUAQMD. This will require, but may not be limited to:

- Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
- The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
- The paving of roadways and their maintenance in a clean condition.
- The prompt removal of earth or other track out material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

<u>Timing for Implementation/Compliance</u>: NCUAQMD requirements shall be acknowledged on the Development Plan that is approved by the HCCDS

Person/Agency Responsible for Monitoring: Applicants, DPW

<u>Monitoring Frequency</u>: Once to review plans; During construction, concurrent with scheduled inspections

Evidence of Compliance: Visible evidence

MITIGATION MEASURE NO. 5

A setback of at least 100 feet from the intermittent stream and of 50 feet from the isolated wetland will be permanently maintained by the applicants or subsequent land owners to the satisfaction of the Humboldt County Planning Department, California Coastal Commission, and California Department of Fish and Game. Said setback shall be shown on the recorded development plan, on file at the Humboldt County Planning Department.

<u>Timing for Implementation/Compliance</u>: Setbacks shall be shown on the Tentative and Final Maps and on the Development Plan that are approved by the HCCDS

Person/Agency Responsible for Monitoring: Applicants

<u>Monitoring Frequency</u>: Once to review Tentative Map; Once to review Final Map; Once to review Construction Plans. Reviewed under any future development proposal.

Evidence of Compliance: Shown on Map

MITIGATION MEASURE NO. 6

If construction activities and/or tree removal are to be conducted during the breeding season (March through August), raptor surveys shall be conducted prior to the start of operations and/or tree removal. If no raptor species are detected during survey efforts, construction can proceed without restrictions. However, if any of the three species are detected, construction activities shall be restricted to preclude activities that produce noise greater than current ambient levels (55-65dB) during the breeding period. Under no circumstances shall a tree hosting nesting raptors be removed during the nesting season.

<u>Timing for Implementation/Compliance</u>: Construction timing and survey requirements shall be shown on Development Plan that is approved by the HCCDS

<u>Person/Agency Responsible for Monitoring</u>: Applicants. Reviewed under any future development proposal.

<u>Monitoring Frequency</u>: Once to review Construction Plans and Determine Timing of Construction, Once to assure compliance; Concurrently with Scheduled construction inspections

Evidence of Compliance: Construction timed to avoid nesting season or Biologist Report submitted to HCCDS

MITIGATION MEASURE NO. 7

Symbolic fencing such as split rail or other wildlife friendly fencing shall be installed along the SMA/Wetland Buffer setback on Parcels 4 and 5.

<u>Timing for Implementation/Compliance</u>: Requirement shall be acknowledged on Development Plan that is approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, HCCDS

Monitoring Frequency: Once to review Construction Plans and once to assure compliance.

Evidence of Compliance: Requirement shown on plans.

MITIGATION MEASURE NO. 8

If any area of cultural deposits is discovered during the course of the project, as required by law, all work shall cease and a qualified cultural resources specialist shall be contacted to analyze the significance of the find and formulate further mitigation (e.g. project relocation, excavation plan, protective cover). And, pursuant to the California Health and Safety Code Section 7050.5, if human remains are encountered, all work must cease and the County Coroner contacted.

<u>Timing for Implementation/Compliance</u>: Statutory requirement shall be acknowledged on Development Plan that is approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants

<u>Monitoring Frequency</u>: Once to review Construction Plans and once to assure compliance. Reviewed under any future development proposal.

Evidence of Compliance: Requirement shown on plans.

MITIGATION MEASURE NO. 9

All proposed occupied structures shall be located outside of the Exclusion Area identified in the Alquist-Priolo Fault Investigation (Appendix A). Note that subsequent Fault Investigations conducted

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pursuant to the Alquist-Priolo Act may reduce the exclusion areas. An occupied structure is defined by the Alquist-Priolo Act as "any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year".

The angle points of the Exclusion Area shall be staked in the field such that they are clearly defined and recognizable to any future owner(s). Intermediate points shall be staked where inter-visibility between angle points does not exist. The Exclusion Area shall be clearly depicted on the Tentative and/or Final Subdivision Map, to be recorded following County approval of this project. Coordinates of the angle points are to be determined and located in relation to the monumented property corners recovered during the boundary survey.

<u>Timing for Implementation/Compliance</u>: Setback areas shall be shown on the Tentative and Final Subdivision Maps and on Development Plan that are approved by the HCCDS. Survey and Staking shall take place prior to construction.

Person/Agency Responsible for Monitoring: Applicants, BID

<u>Monitoring Frequency</u>: Once to review Tentative and Final Maps, Once to review Construction Plans and once to assure compliance. Reviewed under any future development proposal.

Evidence of Compliance: Visible evidence of staking on site

MITIGATION MEASURE NO. 10

A site-specific slope stability investigation shall be performed by a qualified Professional Geologist prior to siting of any occupied structures on Lot 7 due to the precipitously steep and potentially unstable slopes that may be construed as buildable due to their location outside the Exclusion Area. A minimum setback of 20 feet from the grade break of a descending slope in excess of 50% shall be maintained for all occupied structures.

<u>Timing for Implementation/Compliance</u>: Setback areas shall be shown on the Tentative and Final Subdivision Maps and on Development Plan that are approved by the HCCDS. Survey and Staking shall take place prior to construction.

Person/Agency Responsible for Monitoring: Applicants, BID

<u>Monitoring Frequency</u>: Once to review Tentative and Final Maps, Once to review Construction Plans and once to assure compliance. Reviewed under any future development proposal.

Evidence of Compliance: Visible evidence of staking on site

MITIGATION MEASURE NO. 11

Prior to placing a permanent foundation across the uncompacted backfill within the exploratory trenches as shown on the Exclusion Zone Map (Appendix A), a licensed professional engineer shall provide either 1) A design for the re-excavation and replacement of backfill with an engineered, compacted fill, or 2) a design an appropriately engineered foundation to mitigate the potential for settlement. Where (or if) trenches closely parallel a footing, and the trench bottom is within a 2 horizontal to 1 vertical plane, projected outward and downward from any structural element, concrete slurry should be utilized to backfill that portion of the trench below this plane. The use of slurry backfill is not required where a narrow trench crosses a footing at or near a right angle.

<u>Timing for Implementation/Compliance</u>: Requirement and location of trenches shall be shown on Tentative and/or Final Map and on Development Plan that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, HCCDS.

<u>Monitoring Frequency</u>: Once to review Tentative and Final Maps, Once to review Construction Plans. Reviewed under any future development proposal.

Evidence of Compliance: Trench locations shown on Maps and Site Plans.

MITIGATION MEASURE NO. 12

All permanent construction on the subject site shall be designed and constructed to State Title 24 standards for Seismic Zone 4.

<u>Timing for Implementation/Compliance</u>: Seismic standards shall be shown on Development Plan that is approved by the HCCDS.

<u>Person/Agency Responsible for Monitoring</u>: Applicants, BID.

<u>Monitoring Frequency</u>: Once to review Construction Plans to verify requirement and code compliance. <u>Evidence of Compliance</u>: Requirement on map. Plans checked for code compliance.

MITIGATION MEASURE NO. 13

Prior to the start of any construction which will occur during wet weather conditions, an erosion prevention and control plan shall be prepared and submitted to the Humboldt County Building Division for review and approval.

<u>Timing for Implementation/Compliance</u>: Erosion control requirements and compliance methods shall be submitted with the Construction Plans that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, BID.

Monitoring Frequency: Once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 14

New cut slopes into bedrock, shall have a maximum gradient of 1:1 (horizontal to vertical) similar to the current cut slope geometry. New cut slopes into the marine sands or colluvial deposits shall have a maximum gradient of 1.5:1 (horizontal to vertical). Steeper cuts may be feasible if site specific stability analysis is performed by a qualified licensed engineer.

New engineered fill slopes shall be constructed on an adequately prepared surface that has been stripped of deleterious material, and benched to provide to a stable level surface on which to place the fill. The finished fill slope shall have a maximum gradient of 2:1 (horizontal to vertical) unless special design considerations such as reinforced earth or cantilevered concrete retaining structures are recommended and designed by a qualified licensed engineer.

<u>Timing for Implementation/Compliance</u>: Grading plans showing proposed cut and fill slopes and compliance methods shall be submitted with the Construction Plans that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, BID.

Monitoring Frequency: Once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 15

All structural fills shall be constructed as controlled and compacted engineered fills. Structural engineered fills shall be free of organics and composed of sand or gravel. All existing soils with a high organic content derived from stripping of the site, are suitable for reuse as landscape fills only. Only granular fill shall be used for supporting roadways or building foundations.

All structural fill material shall be well graded, imported granular material such as crushed quarry rock or river-run gravels (100-percent passing 3-inch sieve). Native soils on the site may not be suitable for use as structural fill, but may be usable if they are moisture conditioned to optimum moisture content and analyzed by a qualified materials testing laboratory prior to use. Sufficient testing and inspection shall be performed to monitor the suitability of fill materials, and assure compliance with the recommended compaction standards.

<u>Timing for Implementation/Compliance</u>: Engineered fill plans incorporated into grading plans submitted with the Final Map and/or the Construction Plans that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, BID.

Monitoring Frequency: Once to review improvement plans and once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 16

All topsoil shall be removed from areas that will support slab-on-grade foundations. Where excessive amounts of unsuitable soft soils or woody debris are encountered the unsuitable material shall be over-excavated and replaced with suitable engineered fill, placed and compacted pursuant to adopted standards. Alternatively, footings may be built on concrete slurry backfilled footing trenches, excavated to the bearing soil depth. Other potentially-acceptable methods for foundation support include

drilled cast-in-place piers or helical piers. Any such alternative approach shall be designed and approved by a qualified, licensed engineer.

<u>Timing for Implementation/Compliance</u>: Foundation plans meeting standards shall be shown on the Construction Plans that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, BID.

Monitoring Frequency: Once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 17

The site shall be graded to provide positive drainage away from the foundation elements of all structures. A minimum gradient of one percent shall be maintained for all hardscaped areas. A three percent gradient shall be maintained for landscaped areas within 10-feet of a structure. The grading or landscaping design and construction shall be such that no water is allowed to pond anywhere on the site, nor to migrate beneath any structures. All roof storm drainage shall be controlled with the installation of gutters and downspouts. Downspouts shall be connected to tightlines to convey roof storm runoff away from a structure to a suitable outlet point. All outlet points should be armored with rock to act as energy dissipaters and control soil erosion. Runoff from hardscaped areas, including patios, and other impermeable surfaces shall also be contained, controlled and collected, and tight-lined to a suitable outlet point.

<u>Timing for Implementation/Compliance</u>: Site grading plans and on-site drainage control measures shall be shown on the Construction Plans that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, BID.

Monitoring Frequency: Once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 18

The septic system for Lots 2, 7, 8 and 9 shall incorporate shallow Low-Pressurized Pipe (LPP) distribution systems to accommodate subsurface soil conditions, setbacks, and topographical constraints

<u>Timing for Implementation/Compliance</u>: Requirement shall be shown on Construction Plans that are approved by the HCCDS for Lots 2, 7, 8 and 9.

Person/Agency Responsible for Monitoring: Applicants, DEH.

Monitoring Frequency: Once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 19

Septic Systems and leach fields shall be designed and located in conformance with the standards of the Humboldt County Department of Environmental Health. Such standards include, but are not limited to the following:

- Leachfields must be setback 100 feet or more from any existing and/or future wells, perennial springs, ponds, watercourses and outside of any designated Stream Management Areas.
- All leachfields must maintain a minimum 50 foot setback from all existing and proposed property lines.
- Leachlines must be setback 50 feet or greater from any non-engineered fill slopes (excepting trench backfills) and 25 feet or more from any break in slope over 30 percent or any cutbanks 3 feet in height or greater.
- Leachlines must be setback 25 feet or more from any open drainage ditch.
- Leachfields must be setback 10 feet or greater from the septic tanks and dosing chambers or from the foundation of any structure.
- Leachfields must be installed on contour. Smeared trench side walls shall be raked.
- Leachfields shall be installed during the dry season to avoid soil compaction.
- Septic tanks and dosing chambers must be setback 50-feet or more from any wells, perennial springs, ponds, or watercourses and setback 5-feet or more from the permanent foundation of any buildings.
- All surface drainage shall be directed away from all components of the proposed on-site wastewater treatment system.

<u>Timing for Implementation/Compliance</u>: Setbacks shall be shown on Tentative and Final Maps and on the Construction Plans that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, BID, DEH.

<u>Monitoring Frequency</u>: Once to review Tentative and Final Maps, once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 20

No second unit shall be authorized or constructed on Lot No. 8 unless an on-site wastewater suitability study is prepared to demonstrate that a specific septic system design will function appropriately to accommodate the additional wastewater on site.

<u>Timing for Implementation/Compliance</u>: Restriction shall be acknowledged on the Development Plan that is approved by the HCCDS

Person/Agency Responsible for Monitoring: Applicants, BID.

Monitoring Frequency: Once to review Final Map; Once to review Construction Plans

Evidence of Compliance: Shown on Map

MITIGATION MEASURE NO. 21

The applicant shall assure that no construction materials, debris, or waste will be placed or stored where it may be subject to precipitation erosion and dispersion.

<u>Timing for Implementation/Compliance</u>: Requirement shall be shown on Construction Plans that are approved by the HCCDS.

Person/Agency Responsible for Monitoring: Applicants, BID.

Monitoring Frequency: Once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

MITIGATION MEASURE NO. 22

Future residential uses shall comply with all applicable regulations for solid waste disposal and temporary storage to the satisfaction of the Humboldt Waste Management Authority (HWMA), California Coastal Commission, and Humboldt County Health Department.

<u>Timing for Implementation/Compliance</u>: Requirement shall be shown on Construction Plans that are approved by the HCCDS.

<u>Person/Agency Responsible for Monitoring</u>: Applicants, BID.

<u>Monitoring Frequency</u>: Once to review Construction Plans once to verify compliance.

Evidence of Compliance: Visible evidence.

Appendix A

Exclusion Area Map Tentative Subdivision Map